

HTAP2 Global and Regional Model Evaluation Workshop

Monday, 11 May 2015

7:30 Bus Departs Millennium Harvest House Hotel for NCAR Center Green

8:30 **Overview of Progress and Plans**

8:30 HTAP2 & Objectives of the Workshop Terry Keating

Status Reports from Contributing Modeling Groups

Representatives of modeling groups contributing to HTAP2 are asked to briefly summarize

a) the status of their simulations and analyses

b) plans for additional simulations and analyses

c) initial findings related to model performance (Q1) and source attribution (Q2)

9:00 CICERO (OsloCTM3.v2) Marianne Lund (via web)

9:15 EMEP MSC-W (UNIMOD) Jan Eiof Jonson

9:30 ECMWF (C-IFS) Johannes Flemming (via web)

9:45 Lancaster University (FRSGC-UCI CTM) Oliver Wild (via web)

10:00 **Break**

10:30 AQMEII3 Christian Hogrefe

10:50 TFMM/EuroDelta Marta Garcia

11:00 INERIS, CIEMAT (CHIMERE) Marta Garcia

11:15 MICS-Asia3 Terry Keating for Joshua Fu

11:25 Univ. Tenn. Knoxville (Hemis CMAQ) Terry Keating for Joshua Fu

11:35 AeroCom Huisheng Bian

11:45 NASA GSFC (GOCARTv5, GEOS5) Huisheng Bian

12:00 **Lunch & Posters**

13:30 University of Edinburgh, UK Met Office (UKCA) Ruth Doherty

13:45 SSEC-NESDIS (RAQMS) Brad Pierce (via web)

14:00 Univ.Col. Boulder (GEOS-Chem Adjoint) Daven Henze / Yanko Davila

14:15 Georgia Tech (REAM) Yuzhong Zhang

14:30 U Iowa, JPL, GMU (STEM) Min Huang (via web)

14:45 NAGOYA, JAMSTEC, NIES (Chaser) Kengo Sudo

15:00 IITM (MOZART4) Sachin Ghude

15:15 Environment Canada (GEM-MACH) Sylvie Gravel

15:30 **Break**

16:00 NCAR, Leeds, IASS-Potsdam (CAM-Chem) Louisa Emmons

16:15 NOAA/GFDL (AM3) Meiyun Lin

16:30 SNU (GEOS-Chem) Terry Keating for Rokjin Park

16:45 Plenary Discussion of Themes/Issues Terry Keating

17:30 **Adjourn for Day**

17:45 Bus Departs NCAR Center Green for Millennium Harvest House Hotel

Tuesday, 12 May 2015

- 7:30 Bus Departs Millennium Harvest House Hotel for NCAR Center Green
- 8:00 **Initial Evaluation of the Ensemble of Results**
- 8:00 Status of AeroCom/HTAP2 Server and Interface: Data and Tools Michael Schulz (via web)
- 8:20 Status of ENSEMBLE: Data and Tools Stefano Galmarini
- 8:40 Tropospheric Ozone Assessment Report Owen Cooper
- 9:00 North American Inflow Analysis Owen Cooper
- 9:20 Global Ozone Model Evaluation: Lessons from ACCMIP Jordan Schnell
- 9:40 Plenary Discussion Terry Keating
- 10:00 **Break**
- 10:30 **Discussion of Initial Findings**
- 10:30 Introduction to Questions and Initial Statements
- 10:40 Q1. Evaluation of Model Performance
How well can current global and regional models quantify:
a) spatial patterns and temporal trends in
i) surface ozone concentrations
ii) fine particle concentrations
iii) nitrogen deposition
b) elevated levels of ozone in urban and regional locations, including high elevation sites?
- 11:00 Q2. Evaluation of Source Attribution
How well can current global and regional models quantify:
c) contributions of local and regional anthropogenic sources as distinguished from
i) anthropogenic sources outside the United States or North America
ii) stratospheric intrusion
iii) biogenic, wildfires, wind-blown dust, and other uncontrollable emissions
- 11:20 Q3. Standards for Model Evaluation
Are robust and generally acceptable model performance standards established and routinely applied in the global and regional modeling communities?
- 11:40 Q4. Establishing Regional Boundary Conditions
In a nested system, how does global model performance affect regional model performance?
How should future-year boundary conditions for western U.S. regional modeling be determined or evaluated?
- 12:00 **Lunch & Posters**
- 13:30 **Plans for Additional Analyses (How do we improve our answers to Q1-4?)**
- 13:30 Operational Evaluation
- 14:30 Diagnostic Evaluation
- 15:30 **Break**
- 16:00 Modeling Sensitivity Analyses
- 17:00 Next Steps
- 17:30 **Adjourn for Day**
- 17:45 Bus Departs NCAR Center Green for Millennium Harvest House Hotel